



CJew

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

*Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.*

## TRANSMITTAL FORM

*(to be used for all correspondence after initial filing)*

|  |    |                        |               |
|--|----|------------------------|---------------|
|  |    | Application Number     | 10/815,336    |
|  |    | Filing Date            | April 1, 2004 |
|  |    | First Named Inventor   | James Z. Liu  |
|  |    | Art Unit               | 1743          |
|  |    | Examiner Name          | Unknown       |
| Total Number of Pages in This Submission | 23 | Attorney Docket Number | H0006268-0769 |

13277 U.S. PTO  
10/815336

080806

### ENCLOSURES (Check all that apply)

|   |  |   |
|---|--|---|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/<br>Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts<br>under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>7 Pgs International Search Report<br>9 Pgs Written Opinion<br>5 References |
| <input type="checkbox"/> Remarks  |  |   |

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

|              |                              |          |        |
|--------------|------------------------------|----------|--------|
| Firm Name    | Honeywell International Inc. |          |        |
| Signature    |                              |          |        |
| Printed name | Bryan Anderson               |          |        |
| Date         | 8/4/2006                     | Reg. No. | 46,107 |

### CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

|                       |                |      |          |
|-----------------------|----------------|------|----------|
| Signature             |                |      |          |
| Typed or printed name | Bryan Anderson | Date | 8/4/2006 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UTILITY PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: James Z. Liu

Group Art Unit: 1743

Serial No.: 10/815,336

Examiner: Unknown

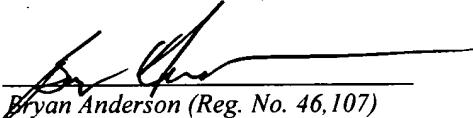
Filed: April 1, 2004

Attorney Docket No.: H0006268-0769

For: MULTIPLE MODES ACOUSTIC WAVE SENSOR

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8(a)**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P. O. Box 1450 Alexandria, VA 22313-1450.

on 8/4/2006. Signature:   
*Bryan Anderson (Reg. No. 46,107)*

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P O Box 1450  
Alexandria, VA 22313-1450

Commissioner:

In accordance with 37 C.F.R. 1.56 and in a manner prescribed by 37 C.F.R. 1.97 and 1.98, this Information Disclosure Statement (IDS) is being submitted herewith for consideration by the United States Patent and Trademark Office.

I. **CONTENT**

This IDS includes:

- A list of all patents, publications, applications, or other information submitted for consideration by the Office on PTO/SB/08A Form, which is included herewith;

- A legible copy of: (i) each foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion; and (iv) all other information or that portion which caused it to be listed, unless subsequently provided in this IDS.

II. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- Except as may be subsequently indicated in this section II, a concise explanation is not required as all of the patents, publications, applications or other information are in the English language.
- A concise explanation of the relevance, as it is presently understood by the individual designated in 1.56(a) most knowledgeable about the content of the information, of all patents, publications, applications or other information listed that is not in the English language.
- A copy of the translation of a non-English Language document, or portion thereof is enclosed with this IDS (e.g., a translation of an abstract).
- Any patent, publication, pending application or other information that is listed on PTO/SB/08A Form, which are not enclosed herewith were previously cited by or submitted to the Office in one of the following applications that has been relied on for an earlier effective filing date under 35 U.S.C 120 and the IDS submitted in the earlier application complies with paragraphs (a) through (c) of 1.98:

| U.S. Application Serial No. | U.S. Filing Date |
|-----------------------------|------------------|
|                             |                  |
|                             |                  |

III. THIS IDS IS BEING FILED UNDER 37 C.F.R. 1.97(b): (check one box)

- Within three months of the filing date of a national application other than a continued prosecution application under 1.53(d).
- Within three months of the date of entry of the national stage as set forth in 1.491 in an international application.
- Before the mailing date of a first Office Action on the merits. In the event that a first Office Action on the merits has been mailed, please consider this IDS under 37 C.F.R. 1.97(c) and see the statement under 1.97(e) or charge deposit account 01-1125 the fee specified by 37 C.F.R. 1.17(p) if such statement is not selected in Section VI.

- Before the mailing of a first Office Action after the filing of a request for continued examination under 1.114.

IV. THIS IDS IS BEING FILED UNDER 37 C.F.R. 1.97(c):

- After the period specified in 37 C.F.R. 1.97(b) and before the mailing date of any of a final action under 1.113, a notice of allowance under 1.311 or an action that otherwise closes prosecution in the application, and accompanied by:
- a statement specified in 1.97(e) as subsequently provided in this IDS; or
- the fee set forth in 1.17(p).

V. THIS IDS IS BEING FILED UNDER 37 C.F.R. 1.97(d):

- After the period specified in 37 C.F.R. 1.97(c) and on or before the payment of the issue fee, and it is accompanied by a statement specified in 1.97(e) as subsequently provided in this IDS and the fee set forth in 1.17(p).

VI. Statement under 37 C.F.R. 1.97(e) (check only one box)

The undersigned hereby states that:

- Each item of information contained in the IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.
- No item of information contained in the IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this IDS.

VII. Statement under 37 C.F.R. §1.704(d)

- The undersigned hereby states that each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 C.F.R. §1.56(c) more than thirty days prior to the filing of the information disclosure statement.

VIII. PAYMENT OF FEES (check one box)

- A check in the amount of \$ \_\_\_\_\_ is enclosed for fees due with respect to this IDS.
- Please charge Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ for the fees due with respect to this IDS. A duplicate copy of this paper is included with this IDS.

IX. CONCLUSION

It is respectfully submitted that the claims presently on file patently distinguish the present invention from each of these references cited in this IDS. The references cited in this IDS are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art. Furthermore the filing of this IDS should not be construed to be an admission that the information cited in this IDS is, or is considered to be, material to patentability as defined in 1.56(b). In addition, the filing of this IDS should not be construed as a representation that a search has been made.

If the Examiner has any questions concerning these IDS, the Examiner is requested to contact the undersigned at the telephone number associated with Customer No. 00128. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule, with a petition if necessary, and charge the appropriate fee to Deposit Account No. 01-1125.

Please charge any additional fees or credit any overpayment related to this IDS to Deposit Account No. 01-1125.

Respectfully submitted,

Date: 8/4/2006

By: 

Bryan Anderson

Reg. No. 46,107

**Honeywell International Inc.  
Customer Number 00128**

Enclosures:  PTO/SB/08A & PTO/SB/08B  
 References  
 Foreign Search Report  
 Fee  
 Other: International Search Report  
PCT Written Opinion



**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.**

Substitute for form 1449/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

**(Use as many sheets as necessary)**

Sheet 1

\_of 2

**Complete if Known**

|                        |               |
|------------------------|---------------|
| Application Number     | 10/815,336    |
| Filing Date            | April 1, 2004 |
| First Named Inventor   | James Z. Liu  |
| Art Unit               | 1743          |
| Examiner Name          |               |
| Attorney Docket Number | H0006268-0769 |

S

1

Attorney Docket Number H0006268-0769

**U. S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|---|--------------------------------|--|---|----------------|
|                    |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |  |   |                |
|                    |                       | WO 01/31328 A1  | 05-03-2001                     | Schlumberger Holdings                              |   |                |
|                    |                       | WO 03/056324 A2   | 07-10-2003                     | Advalytix AG                                       |   |                |
|                    |                       |   |                                |  |   |                |
|                    |                       |   |                                |  |   |                |
|                    |                       |   |                                |  |   |                |
|                    |                       |   |                                |  |   |                |

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND

**TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|  |   |    |   |                          |               |
|--|---|----|---|--------------------------|---------------|
| Substitute for form 1449/PTO   |   |    |   | <b>Complete if Known</b> |               |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br><i>(Use as many sheets as necessary)</i> |   |    |   | Application Number       | 10/815,336    |
|  |   |    |   | Filing Date              | April 1, 2004 |
|  |   |    |   | First Named Inventor     | James Z. Liu  |
|  |   |    |   | Art Unit                 | 1743          |
|  |   |    |   | Examiner Name            |               |
| Sheet  | 2 | of | 2 | Attorney Docket Number   | H0006268-0769 |

| <b>NON PATENT LITERATURE DOCUMENTS</b> |                       |   |  |  |
|--|-----------------------|---|--|--|
| Examiner Initials*                     | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |  |  |
|  |                       | FILLER R.L. ET AL. "Resonators for the microcomputer compensated crystal oscillator", 43rd Annual Symposium on Frequency Control, May 31, 1989, pg. 8-15  |  |  |
|  |                       | VIG J.R., "Chemical sensor based on quartz microresonators", Journal of Microelectromechanical Systems, vol. 5, no. 2, June 2, 1996, pg. 138-140  |  |  |
|  |                       | VIG J.R. "Temperature-insensitive dual-mode resonant sensors - A review", IEEE Sensors Journal, vol. 1, no 1., June 1, 2001, pg. 62-68  |  |  |
|  |                       |   |  |  |
|  |                       |   |  |  |
|  |                       |   |  |  |
|  |                       |   |  |  |
|  |                       |   |  |  |
|  |                       |   |  |  |
|  |                       |   |  |  |
|  |                       |   |  |  |

|                    |  |                 |  |
|--------------------|--|-----------------|--|
| Examiner Signature |  | Date Considered |  |
|--------------------|--|-----------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:  
**Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.